

Brown, *et al.*  
Att. Dkt. No. ABA300/13004

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Brown, *et al.*  
Appl. No.: 09/159,518  
Filed: September 24, 1998  
For: Novel Opioid Peptides for the Treatment of Pain

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Declaration by Joint Inventors (37 C.F.R. § 1.63) and on Behalf of Inventor  
Who Refuses to Sign or Cannot Be Reached (37 C.F.R. § 1.47(a)),  
Power of Attorney and Petition Under 37 C.F.R. § 1.47(a)**

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the application identified above.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 C.F.R. § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119, of any United States provisional applications or foreign application(s) for patent or inventor's certificate or of any PCT International Application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application for patent or inventor's certificate or any PCT International Application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application on which priority is claimed:

Page 1 of 8

Brown, et al.  
Atty. Dkt. No. ABA300/13004

<u>Application Serial No.</u>	<u>Country</u>	<u>Filing Date (Day/Month/Year)</u>	<u>Priority Claimed (Yes/No)</u>
9403263.8	United Kingdom	21 February 1994	Yes
9408179.1	United Kingdom	25 April 1994	Yes
9401519-5	Sweden	3 May 1994	Yes
9502877-5	Sweden	18 August 1995	Yes
9503924-4	Sweden	7 November 1995	Yes

I hereby claim the benefit under Title 35, United States Code, Section 120, of any United States application(s) or PCT International Application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application(s) in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56, which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>Application Serial No.</u>	<u>Filing Date</u>	<u>Status (Patented, Pending, Abandoned)</u>
PCT/SE95/00158	15 February 1995	Abandoned
PCT/SE96/01011	14 August 1996	Abandoned
08/392,918	March 3, 1995	Pending
08/718,585	October 2, 1996	Pending

I am signing this declaration on my own behalf and also under 37 C.F.R. § 1.47(a) on behalf of the joint inventor who refuses to sign or cannot be reached and for whom the following particulars are believed by me to be true:

Full name of inventor: John DiMaio

Last known residence: 12404 Pierre Blanchet  
Montreal, Quebec H1E 4L9, Canada      Citizenship: Canadian

Last known post office address: 12404 Pierre Blanchet  
Montreal, Quebec H1E 4L9, Canada

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by

Brown, et al.  
Atty. Dkt. No. ABA300/13004

fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint Robert A. Armitage, Reg. No. 27,417; Steven R. Borgman, Reg. No. 33,160; W. Scott Brown, Reg. No. 32,968; Barry Bumgardner, Reg. No. 38,397; Andrew G. DiNovo, Reg. No. 40,115; G. Harvey Dunn III, Reg. No. 31,102; Barry E. Engel, Reg. No. 37,127; A.H. Evans, Reg. No. 22,032; Adam Floyd, Reg. No. 39,192; William L. LaFuze; Stuart J. Ford, Reg. No. 37,486; Reg. No. 27,205; J. Clark Martin, Reg. No. 26,198; Gerald D. Malpass, Jr., Reg. No. 40,079; Peter E. Mims, Reg. No. 32,429; Minh-Hien Nguyen, Reg. No. 37,294; Gregory L. Porter, Reg. No. 40,131; W. Ronald Robins, Reg. No. 26,222; Michael A. Sanzo, Reg. No. 36,912; Willem G. Schuurman, Reg. No. 29,998; David B. Weaver, Reg. No. 43,244; and Karen Tucker White, Reg. No. 34,267, all registered to practice before the Patent and Trademark Office as my attorneys with full power of substitution and revocation to prosecute this application and all divisions and continuations thereof and to transact all business in the Patent and Trademark Office connected therewith and request that all correspondence and telephone communications be directed to the following person(s) at the mailing address and telephone number hereafter given:

Name : Michael A. Sanzo  
Registration No. : 36,912  
Address : Vinson & Elkins  
2300 First City Tower  
1001 Fannin  
Houston, TX 77002-6760  
Telephone No. : (202) 639-6585

I hereby petition that this declaration be accepted on my behalf and on behalf of the inventor who refuses to sign or cannot be reached, in accordance with 37 C.F.R. § 1.47(a).

Accompanying this declaration and petition are:

1. The petition fee of \$130.00 (37 C.F.R. § 1.17(i)) in accordance with the requirements of 37 C.F.R. § 1.47(a); and

Declarations of inventor(s) who refuse to sign or cannot be reached

Brown, et al.  
Atty. Dkt. No. ABA300/13004

  
\_\_\_\_\_  
Signature of Inventor William Brown

June 1, 1999  
\_\_\_\_\_  
Date

Residence: 756 Pierre Street  
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada  
Citizenship: Canadian

Post Office Address: 756 Pierre Street  
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada

\_\_\_\_\_  
Signature of Inventor John DiMaio

\_\_\_\_\_  
Date

Residence: 12404 Pierre Blanchet  
Montreal, Quebec H1E 4L9, Canada  
Citizenship: Canadian

Post Office Address: 12404 Pierre Blanchet  
Montreal, Quebec H1E 4L9, Canada

  
\_\_\_\_\_  
Signature of Inventor Peter Schiller

June 1, 1999  
\_\_\_\_\_  
Date

Residence: 3475 Mountain Street, App. 1212  
Montreal, Quebec H3G 2A4, Canada  
Citizenship: Canada and Switzerland

Post Office Address: 3475 Mountain Street, App. 1212  
Montreal, Quebec H3G 2A4, Canada

Brown, et al.  
Atty. Dkt. No. ABA300/13004

Deceased - See attached signatures of co-executors

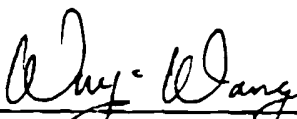
Signature of Inventor René Martel

\_\_\_\_\_  
Date

Last Residence: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5, Canada

Last Citizenship: Canada

Last Post Office Address: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5, Canada



\_\_\_\_\_  
Signature of Inventor Wuyi Wang

*June 1 / 1999*

\_\_\_\_\_  
Date

Residence: 2297 Frenette  
St-Laurent, Quebec H4R 1M3, Canada

Citizenship: Canada

Post Office Address: 2297 Frenette  
St-Laurent, Quebec H4R 1M3, Canada

**INVENTOR(S) DELETED  
ON FILING**

Brown, et al.  
Atty. Dkt. No. ABA300/13004

**Co-Executors of Estate of Deceased Inventor René Martel**

I hereby declare that my residence and citizenship are as stated below next to my name and that I am executing and signing this Declaration as co-executor of the estate of:

Full name of deceased inventor: René Martel

Country of citizenship of deceased inventor: Canada

Last residence of deceased inventor: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5, Canada

Last post office address of deceased inventor: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5,  
Canada

Upon information and belief, I aver those facts which the inventor is required to state and which are set forth in the accompanying Declaration.

I also hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

\_\_\_\_\_  
Signature of co-executor Francis Martel

\_\_\_\_\_  
Date

Residence: 29A Rang St-André  
St-Philippe, Québec  
Canada J0L 2K0

Citizenship: Canadian

Brown, et al.  
Atty. Dkt. No. ABA300/13004

\_\_\_\_\_  
Signature of co-executor Diane Martel

\_\_\_\_\_  
Date

Residence: 760 Marie LeBer, Apt. 108  
Ile des Soeurs, Québec  
Canada H3E 1W6

Citizenship: Canadian

\_\_\_\_\_  
Signature of co-executor Pierre Martel

\_\_\_\_\_  
Date

Residence: 109 Maitland  
Pointe-Claire, Québec  
Canada H9R 3X5

Citizenship: Canadian

List of Applications on Which the Name of the Assignee Should Be  
Changed to AstraZeneca AB

09/159,518

09/254,383

09/254,421

09/308,585

09/254,420

08/776,620

09/043,881

08/718,585



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint Robert A. Armitage, Reg. No. 27,417; Steven R. Borgman, Reg. No. 33,160; W. Scott Brown, Reg. No. 32,968; Barry Bumgardner, Reg. No. 38,397; Andrew G. DiNovo, Reg. No. 40,115; G. Harvey Dunn III, Reg. No. 31,102; Barry E. Engel, Reg. No. 37,127; A.H. Evans, Reg. No. 22,032; Adam Floyd, Reg. No. 39,192; William L. LaFuze; Stuart J. Ford, Reg. No. 37,486; Reg. No. 27,205; J. Clark Martin, Reg. No. 26,198; Gerald D. Malpass, Jr., Reg. No. 40,079; Peter E. Mims, Reg. No. 32,429; Minh-Hien Nguyen, Reg. No. 37,294; Gregory L. Porter, Reg. No. 40,131; W. Ronald Robins, Reg. No. 26,222; Michael A. Sanzo, Reg. No. 36,912; Willem G. Schuurman, Reg. No. 29,998; David B. Weaver, Reg. No. 43,244; and Karen Tucker White, Reg. No. 34,267, all registered to practice before the Patent and Trademark Office as my attorneys with full power of substitution and revocation to prosecute this application and all divisions and continuations thereof and to transact all business in the Patent and Trademark Office connected therewith and request that all correspondence and telephone communications be directed to the following person(s) at the mailing address and telephone number hereafter given:

Name : Michael A. Sanzo  
Registration No. : 36,912  
Address : Vinson & Elkins  
2300 First City Tower  
1001 Fannin  
Houston, TX 77002-6760  
Telephone No. : (202) 639-6585

I hereby petition that this declaration be accepted on my behalf and on behalf of the inventor who refuses to sign or cannot be reached, in accordance with 37 C.F.R. § 1.47(a).

Accompanying this declaration and petition are:

1. The petition fee of \$130.00 (37 C.F.R. § 1.17(i)) in accordance with the requirements of 37 C.F.R. § 1.47(a); and

no refuses to sign or cannot be reached.

---

Signature of Inventor William Brown

Date

Residence: 756 Pierre Street  
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada  
Citizenship: Canadian

Post Office Address: 756 Pierre Street  
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada

---

Signature of Inventor John DiMaio

Date

Residence: 12404 Pierre Blanchet  
Montreal, Quebec H1E 4L9, Canada  
Citizenship: Canadian

Post Office Address: 12404 Pierre Blanchet  
Montreal, Quebec H1E 4L9, Canada

---

Signature of Inventor Peter Schiller

Date

Residence: 3475 Mountain Street, App. 1212  
Montreal, Quebec H3G 2A4, Canada

Post Office Address: 3475 Mountain Street, App. 1212

Montreal, Quebec H3G 2A4, Canada

Deceased - See attached signatures of co-executors

Signature of Inventor René Martel

\_\_\_\_\_  
Date

Last Residence: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5, Canada

Last Citizenship: Canada

Last Post Office Address: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5, Canada

\_\_\_\_\_  
Signature of Inventor Wuyi Wang

\_\_\_\_\_  
Date

Residence: 2297 Frenette  
St-Laurent, Quebec H4R 1M3, Canada

Citizenship: Canada

Post Office Address: 2297 Frenette  
St-Laurent, Quebec H4R 1M3, Canada

**Co-Executors of Estate of Deceased Inventor René Martel**

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Full name of deceased inventor: René Martel

Country of citizenship of deceased inventor: Canada

Last residence of deceased inventor: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5, Canada

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Canada

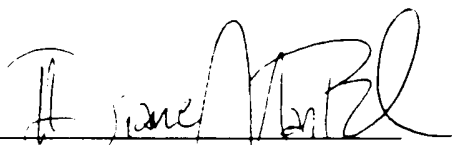
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Date

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\_\_\_\_\_  
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24/05/99

\_\_\_\_\_  
Date

Residence: 760 Marie LeBer, Apt. 108  
Ile des Soeurs, Québec  
Canada H3E 1W6

Citizenship: Canadian

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Signature of co-executor Pierre Martel

\_\_\_\_\_  
Date

Residence: 109 Maitland  
Pointe-Claire, Québec  
Canada H9R 3X5

Citizenship: Canadian

List of Patents on Which the Name of the Assignee Should Be Changed  
to AstraZeneca AB

5,756,520

5,968,953

5,912,271

6,031,007

6,034,097

5,670,524

5,834,489

5,856,342

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5,908,847

5,756,748

6,009,868

5,773,022

5,786,447

5,733,881

5,811,400

5,994,327



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Full name of inventor: John DiMaio

Last known residence: 12404 Pierre Blanchet Montreal, Quebec H1E 4L9, Canada  
Citizenship: Canadian

Last known post office address: 12404 Pierre Blanchet  
Montreal, Quebec H1E 4L9, Canada

I hereby declare that the foregoing statements are true and that all information furnished herein was obtained from the inventor and that the same were made with the knowledge that willful false statements and the like are prohibited by law.

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Signature of Inventor William Brown

Date

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Citizenship: Canadian

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Signature of Inventor Peter Schiller

Date

Residence: 3475 Mountain Street, App. 1212  
Montreal, Quebec H3G 2A4, Canada

Post Office Address: 3475 Mountain Street, App. 1212  
Montreal, Quebec H3G 2A4, Canada

Deceased - See attached signatures of co-executors

Signature of Inventor René Martel

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Date

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**Co-Executors of Estate of Deceased Inventor René Martel**

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Full name of deceased inventor: René Martel

Country of citizenship of deceased inventor: Canada

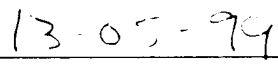
Last residence of deceased inventor: 1150, Cote Vertu, App. 301  
Saint Laurent, Quebec H4L 1Y5, Canada

Last post office address of deceased inventor: 1150, Cote Vertu, App. 301  
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Signature of co-executor Francis Martel

  
Date

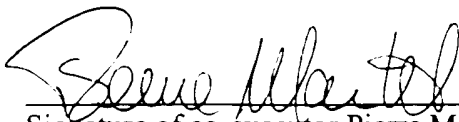
Residence: 29A Rang St-André  
St-Philippe, Québec  
Canada J0L 2K0


\_\_\_\_\_  
Signature of co-executor Diane Martel

\_\_\_\_\_  
Date

Residence: 760 Marie LeBer, Apt. 108  
Ile des Soeurs, Québec  
Canada H3E 1W6

Citizenship: Canadian

  
\_\_\_\_\_  
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\_\_\_\_\_  
Date

Residence: 109 Maitland  
Pointe-Claire, Québec  
Canada H9R 3X5

Citizenship: Canadian

ASSIGNMENT TO ASTRA AB

Title: **NOVEL OPIOID PEPTIDES FOR THE TREATMENT OF PAIN AND USE THEREOF**  
 Inventors: **William Brown, John DiMaio, Peter Schiller and René Martel**  
 Serial No.: \_\_\_\_\_ Filing Date: \_\_\_\_\_  
 Execution Date of Application: \_\_\_\_\_  
 Docket No.: **ABA/300/58000** Country: \_\_\_\_\_

As a below-named inventor, I hereby declare that:

My post office address is as stated below under my signature and I am named as inventor of the inventions or discoveries (herein INVENTIONS) as described in the patent application (herein APPLICATION) identified above. In view of valuable consideration, receipt thereof is hereby acknowledged, I do hereby assign and transfer unto ASTRA AB, a corporation of Sweden having a place of business at Södertälje, its successors and assigns, my entire interest in and the full and exclusive right to the INVENTIONS, the APPLICATION and all related applications (including all divisions, reissues, continuations, and extensions thereof) and all counterparts in other countries, and any and all Letters Patent (and certificates of invention or similar certificates) (herein PATENTS) which may be granted based upon the INVENTIONS or the APPLICATION or related applications or counterparts in other countries; said transfer and assignment being applicable throughout the world. I hereby authorize and request officials of patent offices in any and all countries of the world to issue any and all of the PATENTS, when granted, to ASTRA AB, its successors and assigns, as the assignee of my entire right, title, and interest in and to the same. I agree that I will communicate to ASTRA AB, or its representatives, any facts known to me respecting the invention; testify in any legal proceedings; sign all lawful papers; execute all divisional, continuation, substitution, renewal, and reissue applications; execute all necessary assignment papers to cause any and all of the PATENTS to be issued to ASTRA AB; make all rightful oaths; and generally do everything possible to aid ASTRA AB, its successors and assigns, to obtain and enforce proper protection for the INVENTION in any and all countries throughout the world.

FULL NAME OF FIRST/SOLE INVENTOR: **William Brown**

Signature of Inventor: \_\_\_\_\_

Address: 756 ~~St~~-Pierre Street, Ste-Dorothée, Laval, Quebec H7X 3L8, Canada

Date: 7/6/95

FULL NAME OF SECOND/JOINT INVENTOR: **John DiMaio**

Signature of Inventor: \_\_\_\_\_

Address: 12404 Pierre Blanchet, Montreal, Quebec H1E 4L9, Canada

Date: July 8/95



FULL NAME OF THIRD/JOINT INVENTOR: Peter Schiller

Signature of Inventor: *Peter Schiller*

Address: 3475 Mountain Street, App. 1212, Montreal, Quebec H3G 2A4, Canada

Date: February 8 1995

FULL NAME OF FOURTH/JOINT INVENTOR: René Martel

Signature of Inventor: *René Martel*

Address: 1150, Cote Vertu, Saint Laurent, Quebec H4L 1Y5, Canada

Date: Feb 8 / 1995



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JANUARY 04, 2001

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PILLSBURY MADISON & SUTRO  
MICHAEL A. SANZO  
1100 NEW YORK AVE. NW  
EAST TOWER - NINTH FLOOR  
WASHINGTON, DC 20005-3918



\*101508799A\*

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RECORDATION DATE: 07/28/2000

REEL/FRAME: 011204/0219  
NUMBER OF PAGES: 7

BRIEF: MERGER (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
ASTRA AB

DOC DATE: 01/13/2000

ASSIGNEE:  
ASTRAZENECA AB  
S-151 85 SODERTALJE, SWEDEN

SERIAL NUMBER: 09159518  
PATENT NUMBER:

FILING DATE: 09/24/1998  
ISSUE DATE:

SERIAL NUMBER: 09254383  
PATENT NUMBER:

FILING DATE:  
ISSUE DATE:

SERIAL NUMBER: 09254421  
PATENT NUMBER:

FILING DATE: 03/08/1999  
ISSUE DATE:

SERIAL NUMBER: 09254420  
PATENT NUMBER:

FILING DATE: 03/08/1999  
ISSUE DATE:

SERIAL NUMBER: 08776620  
PATENT NUMBER:

FILING DATE: 01/27/1997  
ISSUE DATE:

SERIAL NUMBER: 09043881  
PATENT NUMBER: 6150335

FILING DATE: 04/01/1998  
ISSUE DATE: 11/21/2000

SERIAL NUMBER: 08718585  
PATENT NUMBER:

FILING DATE: 10/02/1996  
ISSUE DATE:

SERIAL NUMBER: 08403767  
PATENT NUMBER: 5756520

FILING DATE: 03/24/1995  
ISSUE DATE: 05/26/1998

SERIAL NUMBER: 09064187  
PATENT NUMBER: 5968953

FILING DATE: 04/22/1998  
ISSUE DATE: 10/19/1999

SERIAL NUMBER: 08532844  
PATENT NUMBER: 5912271

FILING DATE: 09/18/1995  
ISSUE DATE: 06/15/1999

SERIAL NUMBER: 08875888  
PATENT NUMBER: 6031007

FILING DATE: 08/06/1997  
ISSUE DATE: 02/29/2000

SERIAL NUMBER: 08930867  
PATENT NUMBER: 6034097

FILING DATE: 10/06/1997  
ISSUE DATE: 03/07/2000

SERIAL NUMBER: 08256319  
PATENT NUMBER: 5670524

FILING DATE: 06/28/1994  
ISSUE DATE: 09/23/1997

SERIAL NUMBER: 08851062  
PATENT NUMBER: 5834489

FILING DATE: 05/05/1997  
ISSUE DATE: 11/10/1998

SERIAL NUMBER: 08428170  
PATENT NUMBER: 5856342

FILING DATE: 04/28/1995  
ISSUE DATE: 01/05/1999

SERIAL NUMBER: 08649624  
PATENT NUMBER: 5961305

FILING DATE: 05/23/1996  
ISSUE DATE: 10/05/1999

SERIAL NUMBER: 29060617  
PATENT NUMBER: D398054

FILING DATE: 10/02/1996  
ISSUE DATE: 09/08/1998

SERIAL NUMBER: 08765133  
PATENT NUMBER: 5908847

FILING DATE: 01/02/1997  
ISSUE DATE: 06/01/1999

SERIAL NUMBER: 08612967  
PATENT NUMBER: 5756748

FILING DATE: 03/07/1996  
ISSUE DATE: 05/26/1998

SERIAL NUMBER: 08718584

FILING DATE: 10/02/1996

SERIAL NUMBER: 08718584  
PATENT NUMBER: 5756748

FILING DATE: 10/02/1996  
ISSUE DATE: 05/26/1998

011204/0219 PAGE 3

SERIAL NUMBER: 08448472  
PATENT NUMBER: 5786447

FILING DATE: 05/31/1995  
ISSUE DATE: 07/28/1998

SERIAL NUMBER: 08507370  
PATENT NUMBER: 5733881

FILING DATE: 08/22/1995  
ISSUE DATE: 03/31/1998

SERIAL NUMBER: 08532688  
PATENT NUMBER: 5811400

FILING DATE: 10/06/1995  
ISSUE DATE: 09/22/1998

SERIAL NUMBER: 08809307  
PATENT NUMBER: 5994327

FILING DATE: 03/13/1997  
ISSUE DATE: 11/30/1999

SERIAL NUMBER: 08381868  
PATENT NUMBER: 5710139

FILING DATE: 02/07/1995  
ISSUE DATE: 01/20/1998

MAURICE CARTER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



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\*100140195A\*

VINSON & ELKINS L.L.P.  
MICHAEL A. SANZO  
1455 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, D.C. 20004-1008

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RECORDATION DATE: 03/03/1995

REEL/FRAME: 7805/0463  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BROWN, WILLIAM

DOC DATE: 02/08/1995

ASSIGNOR:

DIMAIO, JOHN

DOC DATE: 02/08/1995

ASSIGNOR:

SCHILLER, PETER

DOC DATE: 02/08/1995

ASSIGNOR:

MARTEL, RENE

DOC DATE: 02/08/1995

ASSIGNEE:

AB ASTRA

S-151 85 SODERTALJE, SWEDEN

SERIAL NUMBER: 08392918

FILING DATE: 03/03/1995

DIANE RUSSELE, EXAMINER  
ASSIGNMENT DIVISION  
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75000 U.S. PTC

02-28-1996

U.S. DEPARTMENT OF COMMERCE

FOR: 6-93)



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OBM No. 0651-001, (exp. 4/94)

02/27/96



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To the Honorable Commissioner of Patents and

Original documents or copy thereof.

02140195

1. Name of conveying party(ies):

William Brown, John DiMaio, Peter Schiller, and  
René Martel

Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies):

Name: AB Astra

Internal Address: \_\_\_\_\_

Street Address: S-151 85 Södertälje

City/State/ZIP: Sweden

3. Nature of conveyance:

- Assignment
- Security Agreement
- Other \_\_\_\_\_
- Merger
- Change of Name

Execution Date: February 8, 1995

Additional name(s) & address(es)

attached?  Yes  No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

PCT/SE95/00158

B. Patent No.(s)

08/3929/8

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael A. Sanzo

Internal Address: \_\_\_\_\_

Street Address: Vinson & Elkins L.L.P.

1455 Pennsylvania Avenue, N.W., Suite 800

City/State/ZIP: Washington, D.C. 20004-1008

MS19607 03/07/95 08392918 22-0365

6. Total number of applications and patents involved:

1

7. Total Fee (37 C.F.R. § 3.41) ..... \$ 40.00

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196-581 40.00CH

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To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Michael A. Sanzo  
Name of Person Signing

Michael A. Sanzo  
Signature

March 3, 1995  
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MRD 3/23/95

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OBM No. 0651-0011 (exp. 4-94)

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1. Name of conveying party(ies):

Astra AB

Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies):

Name: AstraZeneca AB

Internal Address:

Street Address:

City/State/ZIP: S-151 85 Södertälje

SWEDEN

Additional name(s) & address(es)

attached?  Yes  No



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- Other
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- Change of Name

Execution Date: January 13, 2000

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Internal Address:

Street Address: Pillsbury Madison & Sutro  
East Tower - Ninth Floor  
1100 New York Avenue, N.W.

City/State/ZIP: Washington, D.C. 20005-3918

6. Total number of applications and patents involved:

27

7. Total Fee (37 C.F.R. § 3.41) \$ 1,080.00

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08/28/2000 DNGUYEN 00000200 09159518

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Signature of AstraZeneca AB

Signature of AstraZeneca AB

Total number of pages including cover sheet, attachments, and document

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11-08-2000

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USPTO Form 1594 (Rev. 6-93)

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Patent and Trademark Office

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101508799

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Astra AB

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7-28-00

Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies):

Name: AstraZeneca AB

Internal Address:

Street Address:

City/State/ZIP: S-151 85 Södertälje

SWEDEN

Additional name(s) & address(es)

attached?  Yes  No

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Other \_\_\_\_\_

Execution Date: January 13, 2000

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

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B. Patent No.(s)

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Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael A. Sanzo

Internal Address:

Street Address: Pillsbury Madison & Sutro  
East Tower - Ninth Floor  
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City State ZIP: Washington, D.C. 20005-3918

6. Total number of applications and patents involved:

27

7. Total Fee (37 C.F.R. § 3.41) \$ 1,080.00

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Signature

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MICHAEL A SANZO  
 VINSON AND ELKINS  
 2300 FIRST CITY TOWER  
 1001 FANNIN  
 HOUSTON, TX 77002-6760

*MD*

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DEC 2 1999

**NOV 30 1999**

**SPECIAL PROGRAMS OFFICE  
 DAC FOR PATENTS**

In re Application of :  
 Brown, DiMaio, Schiller, :  
 Martel (deceased) and Wang :  
 Application No. 09/159,518 :  
 Filed: September 24, 1998 :  
 For: Novel Opioid Peptides for :  
 the Treatment of Pain : *4-501P*

DECISION ACCORDING STATUS  
 UNDER 37 CFR 1.47(a)

This is in response to the papers filed June 2, 1999, which have been treated as a petition under 37 CFR 1.47(a).

The petition is granted.

Petitioner has shown that the non-signing inventor has refused to join in the filing of the above-identified application.

The above-identified application and papers have been reviewed and found in compliance with 37 CFR 1.47(a). This application is hereby accorded Rule 1.47(a) status.

As provided in Rule 1.47(a), this Office will forward notice of this application's filing to the non-signing inventor at the address given in the Declaration. Notice of the filing of this application will also be published in the Official Gazette.

After this decision is mailed, the above identified application will be forwarded to Group Art Unit 1440.

Telephone inquiries regarding this decision should be directed to the undersigned at (703) 306-3189.

*[Handwritten signature]*

Kevin Turner



UNITED STATES DEPARTMENT OF COMMERCE  
 Patent and Trademark Office  
 ASSISTANT SECRETARY AND COMMISSIONER  
 OF PATENTS AND TRADEMARKS  
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**NOV 30 1999**

**SPECIAL PROGRAMS OFFICE  
 DAC FOR PATENTS**

John DeMaio  
 12404 Pierre Blanchet  
 Montreal Quebec H1E 4L9 CANADA

In re Application of  
 Brown, DiMaio, Schiller, Martel (deceased) and Wang  
 Application No. 09/159,518  
 Filed: September 24, 1998  
 For: Novel Opioid Peptides for the Treatment of Pain

Dear Mr. DeMaio:

You are named as a joint inventor in the above identified United States patent application, filed under the provisions of 35 U.S.C. 116 United States Code, and 37 CFR 1.47(a), Rules of Practice in Patent Cases. Should a patent be granted on the application you will be designated therein as a joint inventor.

As a named inventor you are entitled to inspect any paper in the file wrapper of the application, order copies of all or any part thereof (at a prepaid cost per 37 CFR 1.19) or make your position of record in the application. Alternatively, you may arrange to do any of the preceding through a registered patent attorney or agent presenting written authorization from you. If you care to join the application, counsel of record (see below) would presumably assist you. Joining in the application would entail the filing of an appropriate oath or declaration by you pursuant to 37 CFR 1.63.

Telephone inquiries regarding this communication should be directed to the undersigned at (703)305-9285. Requests for information regarding your application should be directed to the File Information Unit at (703)305-3733. Information concerning the status of your application should be directed to the Special Programs Office, Patent and Trademark Office, Certification Division, Washington, D.C. 20231, or to the nearest Patent Office outside the Washington, D.C. area.

*[Handwritten Signature]*  
 Karen Tyson  
 Legal Advisor  
 Special Programs Law Office

UNITED STATES DEPARTMENT OF COMMERCE  
 PATENT AND TRADEMARK OFFICE  
 WASHINGTON, D.C. 20231